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ABSTRACT

This guide provides assistance in selecting and designing the day care center's building and grounds and in planning and arranging the center's playroom. In regard to the building and grounds, discussion considers program and support service functions, highly desirable features of buildings and grounds, playroom space, outdoor space, and principles for designing the playyard. Discussion concerning the playroom focuses on the activity center, equipment and materials, criteria for choosing play equipment and materials, and a playroom equipment list specifying basic and optional items for activity centers devoted to art, blocks, dramatic play/house play, library/language/books, manipulative/constructive/quiet play, music/movement, sand, science/pet, water play, and woodworking/carpentry activities. In conclusion, a reference list cites general references on space, equipment, and materials; outdoor play space/the playyard; equipment and materials for play; audio-visual materials; and organizations and agencies considered useful to those involved in day care program planning activities. (RH)

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Facilities and Equipment for Day Care Centres

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Selecting and Designing the Building and Grounds

A

Adequate facilities and equipment are essential starting points for any day care program. The choice of location, the design of the building, the selection and purchase of equipment and materials, and the organization of the playrooms and playyard are all critical to the effective functioning of the program.

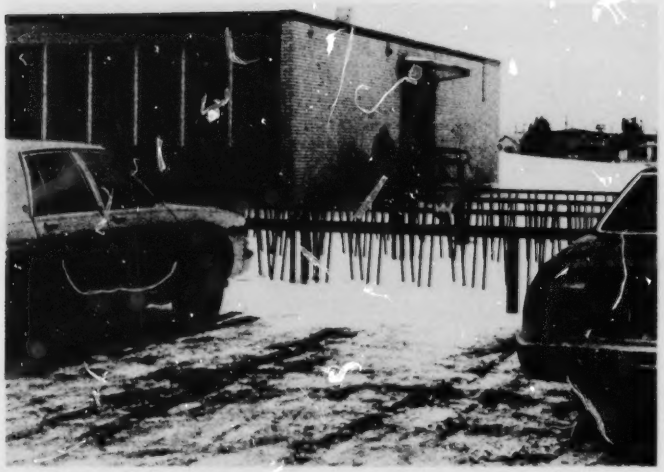
Research studies of children's use of space and equipment suggest that the ratio of space to children and the way the equipment and materials are placed within the space can affect the length of child involvement, the quality of interaction among children, and the emotional state of the children and the staff. A higher quality of space is associated with longer involvement, more elaborative play, more positive interaction, and happier more contented children.

Workshops and training programs have resulted in day care staff successfully applying important principles and criteria to select, design, and organize facilities and equipment with dramatic changes in noise level, disruptive and random behaviours in the children and frustration and tiredness levels in the teachers. This guide presents these principles and criteria along with other useful information to help you plan and improve your program quality.

Program and Support Service Functions

Consideration of the program and support service functions in day care is an essential first step to selecting a site and designing a building, or to choosing an existing building and planning renovations. These functions and the space concerns they generate are outlined below:

Program Service Functions			Space Factors
for children	play activity program	play indoors	• playrooms – 1 per group of children • playyard • indoor gross motor area for inclement weather
		play outdoors	• storage
	routines	arrival & departure	• lockers – 1 per child • drying facilities for mitts, etc.
		toileting	• bathrooms – attached to playrooms, one opening to outside
		washing	• sink area in playroom
		eating	• space for tables and chairs in dining room or playroom
		sleeping	• cot storage
		transition	• halls, exits, pathways in rooms



for parents	arrival & departure with children	• parking

	relaxation	• reception area
	information and resource provision	• displays and seating areas
	observation	• seating and viewing areas
	intake	• private meeting area
for staff	arrival & departure	• parking • coat storage
	relaxation	• staff room
	preparation & planning	• sink & storage
	meeting with parents	• private meeting area

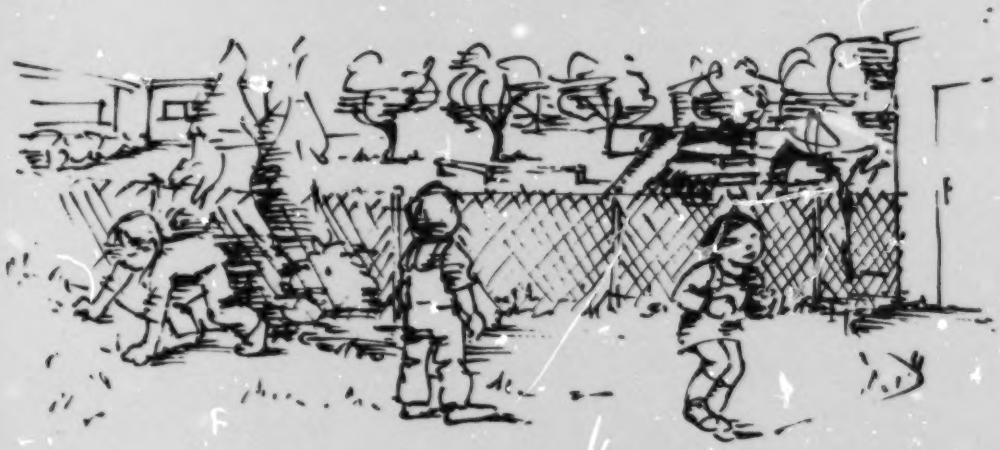
special programs	illness	• isolation room • medicine cabinet inaccessible to children
	developmental & remedial services	• resource room, storage • exit and entry ramps • special bathroom fixtures
Support Services Functions		**Space Factors**
administration	board meetings records	• meeting rooms • storage
	director	• office
clerical	secretary	• office
	records	• storage
	office machines	• use area
	receiving & shipping	• unloading & loading area
food service	food preparation	• counters • stoves • exhaust system • storage – dry refrigeration freezer
	food service	• cart parking • ramps or level halls • dishwasher • dish storage
	receiving	• unloading area
maintenance & building management	utilities	• water in all rooms • outside taps in playyards • power outlets – all around each room and in the playyard • heat – warm floors • furnace, radiators, etc. inaccessible to children
	cleaning & laundry	• use & storage area • harmful materials inaccessible to children
	garbage	• inaccessible to children

The Building and Grounds

Highly Desirable Features

Specifically designed for day care
Easily accessible to transportation facilities
Attached playyard
Sole use
Main floor program areas

Facilities which best meet the needs listed above are usually specifically designed as day care centres. The site has been selected for easy accessibility to traffic arteries and bus routes but is in an area generally suitable for children: there is adjacent or nearby park and open area, and there is enough room for a playyard opening off the playrooms. The building is of a moderate size, has a non-institutional appearance, is available for full-time use for day care, and the program services are on the main-floor level of the building.



Nearby park and open areas

Redesigned or adapted space should approximate the criteria for specifically designed space as closely as possible. Shared use for limited periods such as Sunday school has proved workable; so have program services on other floor levels as well as nearby but unattached playyards. But, the more the site and the building deviate from the desirable criteria, the greater the difficulties in operating a satisfactory program for children.

Moderate size
40-60 children

Some excellent references on building design and renovations are listed in the reference list at the end of this brochure.

Playroom Space

Highly Desirable Characteristics

Each group has its own "home room"

Each group of children in the day care program should have a specific room designated as the "home room". In this space, the child spends the majority of the day-care day. The physical characteristics of this room affect the behaviours of both children and staff. Small crowded, noisy rooms are associated with fatigue, irritability, negative behaviours such as quarreling and physical aggression or the opposite ones of withdrawal and passivity. Sufficient well-organized, sound-absorbing space contributes to happy, involved behaviour and pleasant, supportive, cooperative interactions among children and staff.

A variety of functions

In full-day care, the playroom serves a range of functions providing for play activity, eating, sleeping, parent presence, materials preparation and storage, supervision, child safety, and room cleaning and maintenance. In the Canadian climate, this space must

A room for all seasons

be a room for all-seasons, accommodating the children's play activities for most, and sometimes all, of the day during inclement weather. On these days the room must meet the young child's needs for large muscle activity of the whole body, arms and legs. A room that adequately accommodates both gross motor and the other activities necessary for a group of 15 to 20 young children of three to five years of age should measure 90 m^2 (969 $ft.^2$). Minimum-size rooms are acceptable only where there is daily access to a large gym or auditorium; otherwise the program cannot meet the young child's needs.

Optimally 90 m^2 or approx. 1000 $ft.^2$ for 15 to 20 children over 3 yrs

Room size proportional to age of children and number in group

Minimum space of 3.25 m^2 or 35 $ft.^2$ of "clear" space per child

For children under three years of age, smaller-sized groupings are required so the room size may be proportionally smaller. Preferably no room for group care of children should provide less than 3.25 m^2 (35 $ft.^2$) of clear floor space for each occupant, including required staff. Clear floor space measurements do not include floor space covered by built-in furnishings such as cabinets, and do not

include space in attached bathrooms or sleeping rooms or any space outside the room. Rooms with dimensions less than 6 m × 6 m (approx. 20 ft. × 20 ft.) do not allow adequate provision for children's play and routing needs, even with very small groupings.

Attached bathroom
Direct door to playyard

Ideally the room will have an attached bathroom and an exit directly to the playyard. Both these features permit greater independence for children and ease supervision tasks for staff. Bathrooms can be small enough to contain only toilets because

Child-height sinks

child-height sinks in the classroom simplify supervision of hand-washing and are usable for waterplay and art activities. Playyard exits need to be carefully draft-proofed for cold weather. Climate concerns also make it imperative that the heating and ventilating requirements avoid cool drafts and ensure a

Warm floors

wam zone at the floor, the level preferred by the child for play.

Washable flooring

Children's play and routines call for movement and sound and include the use of water, sand and wet, sticky, and spillable materials. The play and maintenance functions must both be considered in the choice and location of types of floor and wall surfaces. Washable, durable flooring is needed, both hard

Sound-proofing

surface and carpeting for sound deadening. Ceilings and walls should be of sound-proofing materials, with extensive display area at the child's eye level.

Opportunity for variety and flexibility of spatial organization

Children's play needs and interests change through time and the space must provide for reorganization and change, daily to accommodate eating and sleeping, and occasionally for major changes to create novelty and interest. Features contributing to flexibility include: movable shelving of reasonable size and weight to be handled by staff; lockable castors on all large equipment, including platforms; movable sections of carpeting of varied shapes and sizes, and display surfaces on screens or backs of large equipment. Built-in areas of carpeting, shelving and display tend to limit the potential for reorganization.

Aesthetically pleasing

A well-designed playroom presents an appearance that is aesthetically pleasing, colourful and warm. The room entrance should have an appearance of openness, inviting parents, children and visitors to enter and be welcome. Adequate artificial lighting along with sources of natural light, preferably windows at the child's eye level, are important features.

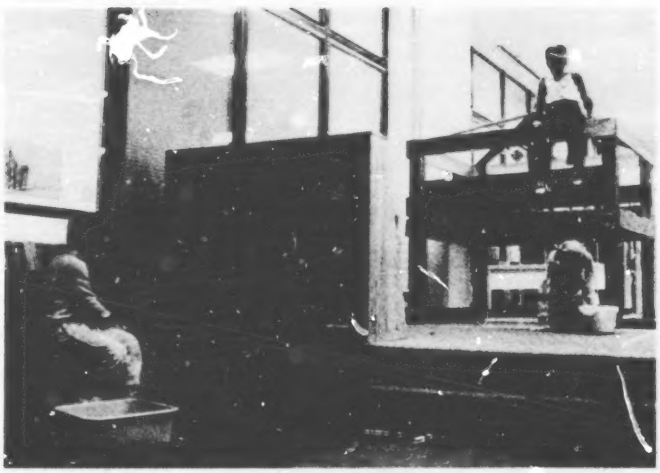
An "open" entrance

Windows at child's level

Visual complexity

Bright primary colours and a variety of textures, surfaces, levels and lines should combine to create visual complexity and interest. Different levels contribute to visual complexity, provide a range of

Variety of levels



Variety of surfaces

perspectives for children, and enhance the potential for gross motor activity. Different textures and surfaces permit flexibility and offer a range of sensory experiences for children.

Outdoor Play Space

Important Considerations

Playyard attached to the centre building

An attached playyard is essential for any day care program which adequately meets the needs of young children for extended daily periods of outdoor activity in reasonable weather. Young children need to go outdoors as much as possible even when the weather is very cold. However, they cannot remain outside for long periods. Any distance to and from the outdoor play area reduces the time available for play or

precludes going out altogether. This problem is overcome by an attached playyard which can afford unlimited access to toileting facilities, thus enabling extended outdoor time for a group of children.

Access to toileting facilities from outdoors

Provision for a wide range of activities

A number of additional reasons exist which emphasize the desirability of attached playyards. The outdoor program should provide opportunities for activities not possible indoors, but it should also provide for many "indoor" activities to occur outside. Painting, music, creative drama, storytelling, block-building present new perspectives and possibilities when carried on outside. Without an attached playyard, there is limited potential for moving these materials outside to carry on such activities.

Opportunity for gross motor play

Traditionally, the outdoor play area has been intended to provide the child with opportunities for large motor exercise play and wide-ranging, noisy activity not possible indoors. Such activities are most safely and comfortably done by young children on equipment appropriately scaled to their size and abilities. Because such equipment is frequently vulnerable to larger users, it is not available on public playgrounds. Where no climbing equipment is available, the child lacks the opportunity to exercise and develop the upper part of the body and arms.

Appropriately scaled equipment

Storage close to use

Storage close to the area of use facilitates access to outdoor equipment and materials and enables the use of a greater variety of materials such as riding toys, sand and water play accessories, hollow blocks, movable parts, and "junk" or salvage materials. These construction materials allow an adventure playground experience, where the child can reorganize and construct the play environment.

Movable pieces

Construction activities

Finally, the availability of special features such as outside taps and plug-ins expands the potential for activity. Extended use time, appropriate equipment size, nearby storage, and special features are only possible with an attached playyard.

Principles for Designing the Playyard

Fenced area

Open area beyond fence

Minimum size of 550 – 600 m^2 (approx. 6000 $ft.^2$)

Limited number of children using at one time to permit 18-19 m^2 per child

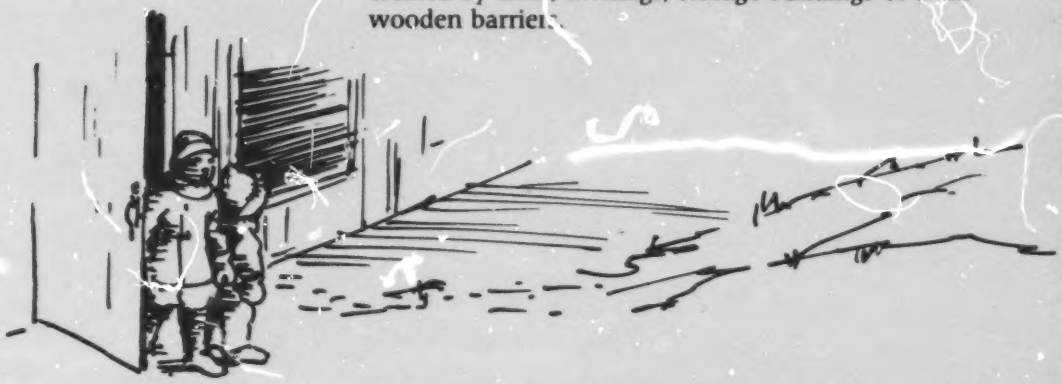
Like the playroom, the playyard must be of minimum size to permit the inclusion and arrangement of sufficient equipment and areas to accommodate a wide range of children's needs and types of activities. The best potential occurs where there is a fenced area for exclusive use of the day care program and large areas of open space beyond the fence such as a schoolground or public park. These larger areas can be used for some activities thereby reducing the number of activities which need to be carried out in the fenced area. Where such an arrangement of fenced and open space occurs, a minimum playyard size would be 550 to 600 m^2 (6000 $ft.^2$). Recommended guidelines for playyard space are 18.6 m^2 per child (200 $ft.^2$). A playyard of 550 m^2 would accommodate at any one time about 30 children or two groups of 15 children each. To provide enough space for children to move freely and vigorously, the number of children in the outdoor play space at one time should be limited according to the amount of space available. Therefore, a smaller play ground area necessarily reduces the amount of time each group can be outside.

Sun and shade

Wind break

Each playroom has a door to playyard

The location of the playyard in relation to the building affects the use because of climate factors. The best location provides day-long sunshine, some noonday and afternoon shade and is on the downwind side from prevailing winds. Ideally each playroom should have a door onto the playyard because easy access creates increased use and greater flexibility for children to move in and out independently. Where the playyard cannot be ideally located, shade can be created by trees, awnings, storage buildings or solid wooden barriers.



Good drainage

Wet weather surfaces

A second important consideration in determining location is drainage. The site must be well drained and contain surfaces suitable for use in all types of weather. However, as much as possible, the playyard should be retained or developed as a natural environment with natural materials.

High unclimbable fence

Storage shed

The playyard should be surrounded by a high relatively unclimbable fence which permits a clear view in and out. This obstacle will protect the young children within but allow them to see beyond the playyard while at the same time excluding all but the most determined intruders. A gate large enough to admit a truck should be located in the part of the fence closest to a vehicle access route. All outdoor equipment and locations are vulnerable to vandalism, and this concern should be kept in mind in constructing equipment and storage facilities. The latter should be sufficiently large to contain all movable equipment. Sturdy large doors opening directly onto the pathways will permit equipment to be easily removed by staff and children for daily use.

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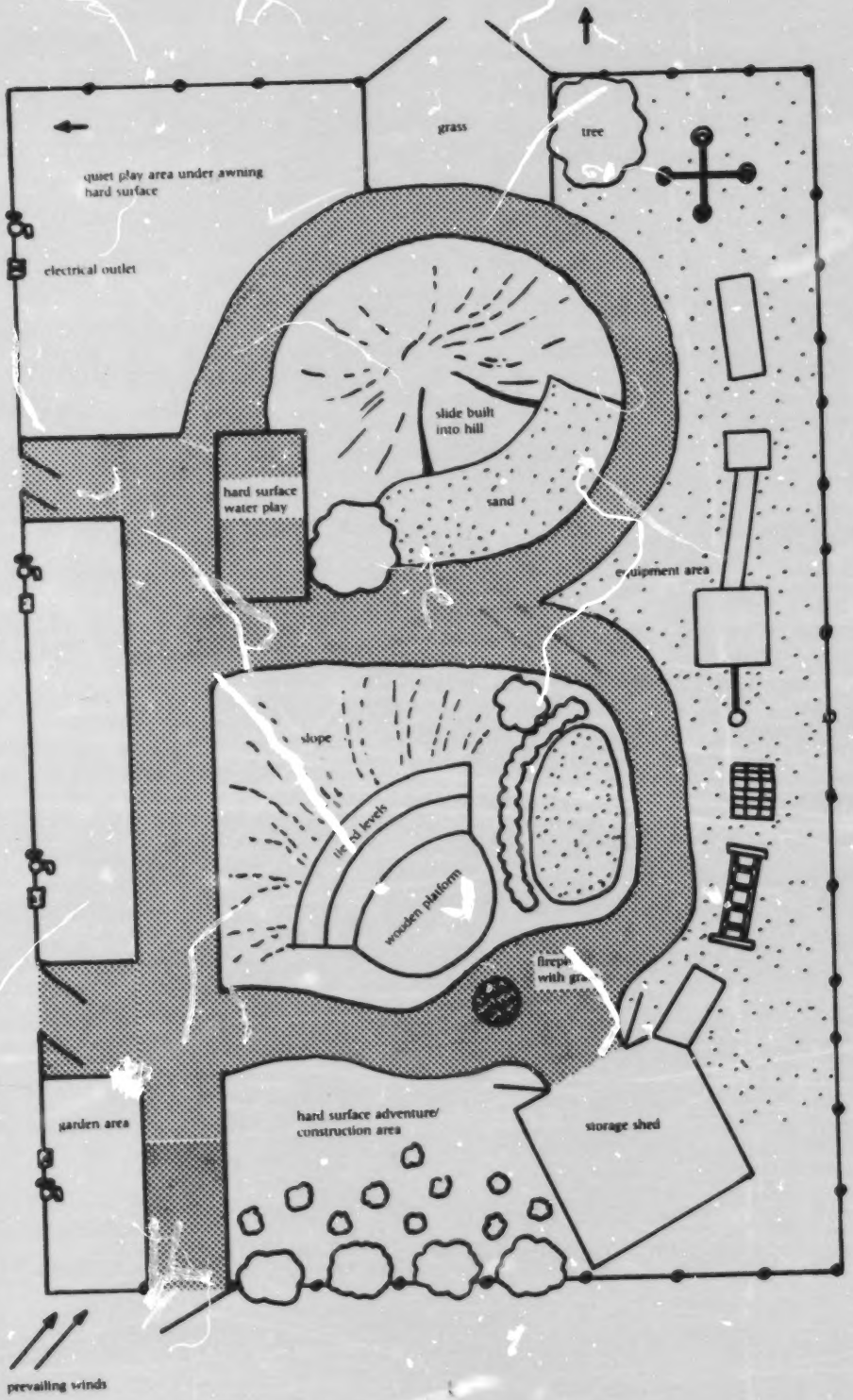


Playyard Figure one

Variety of levels, surfaces, textures, equipment

The outdoor play space should provide a variety of experiences in levels, surfaces, textures and equipment. Like play space indoors, the outdoors space should be arranged in defined areas which combine the terrain, surfaces, and equipment related to a particular set of activities. These areas need to be united and separated by a clear continuous pathway leading from the playroom door as shown in the accompanying diagram, which illustrates some other important playyard features. The hard-surfaced pathway, usable in all weather, doubles as a riding area. The playyard has a cluster of trees on the west side and these along with the shed serve as a windbreak from the prevailing westerly winds. Clustered along with bushes, the tree area possesses potential for a dramatic play and hide-away area.

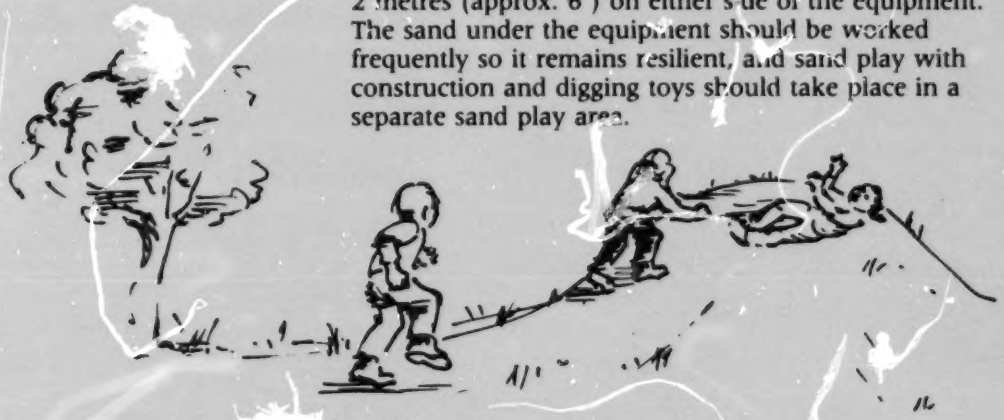
Defined areas

Clear, hard-surface pathway

Treed area

Equipment area

The equipment area is designed to create links in a chain of experiences as the child follows through the equipment swinging, crawling, sliding, balancing and repeating some of these experiences, for instance climbing on rope rather than wood. For safety reasons all the equipment should be firmly fixed in concrete anchors covered by 30 cm (approx. 12") of deep, loose sand. To create a safe fall zone, the sand should extend 2 metres (approx. 6') on either side of the equipment. The sand under the equipment should be worked frequently so it remains resilient, and sand play with construction and digging toys should take place in a separate sand play area.



Sloping area

The hummock provides a slope sufficient for young children to slide on in winter as shown in the accompanying pictures, and useful for rolling and sliding on in summer. It also has potential for creative movement and drama activities. Hedges and raised planters serve to define areas and restrict traffic through play areas.

Firepit

The firepit is built into the riding path and covered with a sturdy grate. This firepit has the features of versatility and safety with fireproof edges. Benches on either side of the pathway would double for use with the firepit or for adult seating at other times.

Quiet zone

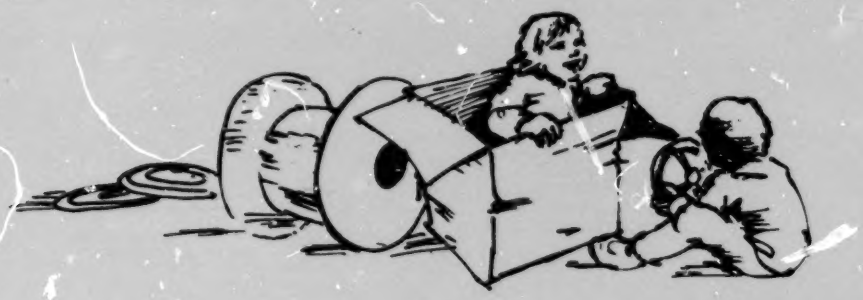
The quiet zone of the playground is located at one end to isolate it somewhat from more vigorous play. It is covered by an awning for summer shade and use in drizzly weather. The following list outlines desirable areas, along with their related equipment, special features and textures, and associated activities.

Area and Equipment	Special Features & Textures	Activities
Access Area large space for group to go in and out	adjacent to building, doorways tarmac	walking, waiting, gathering
Riding Area/Pathway tricycles, wagons, riding vehicles, skipping ropes, balls, brooms, snow shovels	continuous, wide enough to pass hard tarmac/concrete	pedalling, turning, pushing, riding, bouncing, walking, skipping, hopping
Boundary Areas fence hedge dividers planting beds	metal rough wood spongy/bark chips earth	looking, walking, sitting, gardening
Tree/Natural Area mulch, bushes, treehouse or platform	clustered for groves & bowers soft/rough, smooth/strong, wood/turf, dirt/soil, spongy	climbing, hiding, lying, imagining, swaying, swinging, feeling

Area and Equipment	Special Features & Textures	Activities
Storage Area shed, secure lock	continuous with riding path wood/hard, rough	lifting, pushing, pulling, moving
Equipment Area deep loose sand, platforms, bridge, pole, latticed cubes, trestles, ladders, planks, ropes, tunnels, nets, swings – tire on a rope, slide, trapeze	sequenced order canvas, rope, metal, chain, rubber, wood, plastic, sand	swinging, jumping, hanging, pushing, climbing, sliding, crawling, dropping, landing, reaching, stretching, balancing, leaning
Firepit boundary benches, grate to cover, screen to control ashes, fireproof edging	built into pathway firm/hard, soft edges, metal/concrete	burning, lighting, blowing, cooking, toasting, laughing, sitting, watching, talking

Quiet/Passive Area picnic tables, manipulative materials	firm/hard, smooth/strong, tarmac/concrete	thinking, talking, sitting, cutting, fitting, drinking, painting, gaming
Constructing Area workbench	firm/hard, smooth/level	building, nailing, constructing, stapling, sawing
Sand Area boundary, water source for dampening, damp-proof cushions, containers, wheeled toys	different levels soft/yielding, rough, damp	heaping, pushing, pulling, smoothing, crawling, lying, kneeling, lifting, sifting, digging

Adventure Area hollow blocks, salvage materials, boards, boxes, barrels, spools, crates, tires, steering wheels, pipes, hubcaps	different levels firm/hard	constructing, moving, fitting, joining, balancing, matching, crawling, lying, kneeling, lifting, climbing, jumping, imagining, imitating



Garden Area garden tools, wheelbarrow	boundary soil/dirt	planting, digging, raking, hoeing, lifting, pulling, cutting
Water Area wading pools, tubs, fountain, shower, paint easels, water tap, pails & brushes, hoses & sprinkler	hard/soft, tarmac, non-slip, grassy/turf, wooden slats	drinking, splashing, pouring, swimming, brushing, painting, bailing, running
Dramatic Play houseplay – latticed houses, amphitheatre, novelty features: boat, car, tree trunk with limbs	wood-slatted, grassy/turf, tarmac/concrete, wood, metal	imagining, climbing, rolling, watching, sitting, rocking, steering

Area and Equipment	Special Features & Textures	Activities
Movement Area electric outlet for record player, parachute, sleds, sheets of plastic or cardboard	different levels wood platforms, raised, sunken, flat, grassy-turf, spongy, wood, sand, metal, snow in winter, slippery	rocking, rolling, turning, dancing, somersaulting, bending, stretching, reaching, imagining, jumping, balancing, running, climbing, crawling, sitting, sliding, squatting, singing
Open Area backstop, games equipment: balls, bats, bean bags	adjacent open ground, grass/turf, hard, tarmac	running, throwing, shouting, kicking, hopping, catching, batting, hitting

Useful references for designing outdoor play space and making and choosing equipment are listed at the end of this brochure.

Planning and Arranging the Playroom

B

Highly Desirable Characteristics

Meets the child's needs

The child's needs for security, movement and learning are fostered where appropriate equipment and materials are carefully arranged within the framework of a playroom which provides adequate space and the other qualities described in Section A, *Selecting and Designing the Building & Grounds*. The child needs an environment where the child is able to explore freely but safely and where the child can exercise independent choices from a wide variety of opportunities to act on and affect the environment. The opportunity to move, to select activities independently of adult direction, and to use materials in an individual and unique way allows the child to release energy through exercise, to enhance self-esteem through self-expression, and to learn through discovering consequences and relationships in both physical and social worlds.

Safety

Movement

Self-expression

The child's space

The playroom should be the child's space, free of the prohibitions and restrictions common to the child's other environments. As a special environment, it possesses a specific set of characteristics.

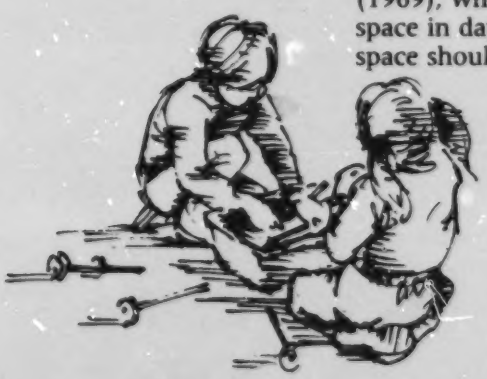
All areas accessible to child

All areas of the room and attached areas should be accessible to the child, with the possible exception of a small amount of high shelving. Built-in furnishings such as sinks, toilets, shelving, blackboards, display areas, and climbers as well as movable equipment should be scaled so the child can manage activities without adult assistance.

Child-scaled furnishings

1/3 uncovered floor space

To provide plenty of space for activity, there should be a balance of covered and uncovered space. According to Kritchevsky, Prescott and Walling (1969), who did extensive research on organization of space in day care centres, at least one-third of the floor space should be free of furnishings and equipment.



Related materials stored together

To help the child make associations and see relationships, and to foster self-selection, equipment and materials commonly associated with a particular type of play activity should be stored together in an area designed for that play. This area usually referred to as a centre, zone or corner needs to be clearly defined and is usually partly or almost totally enclosed by the arrangement of the shelving, furniture and screens. Such enclosure excludes transient travel which tends to distract and to disrupt play thereby reducing concentration, involvement and elaboration. These desirable characteristics of children's activity are best served by carefully arranged activity centres.

Clearly defined activity areas

Clear pathways

To accommodate transition from one area to another or from any area to the room exits, clear, reasonably direct, bordered pathways must be provided. However, direct pathways the full length of the room should be avoided because they will encourage disruptive running behaviours.

Visibility and invisibility

Safety and supervision are important concerns in planning the playrooms. Resilient landing zones below climbers, and visibility from adult eye level are necessary. Fortunately, the child-adult height differential means that we can have areas that can be seen by adults but are visually discrete for children. Some research and theory suggests that it may be important to provide enclosed places where an adult cannot see directly so that a child can have some privacy and escape the sense of continuous unrelenting supervision.

The Activity Centre

Basic unit of organization

The activity centre is the basic unit of playroom organization. Choosing which centres to include and planning their location in relationship to each other and to important playroom features is an essential part of the teacher-caregiver role.

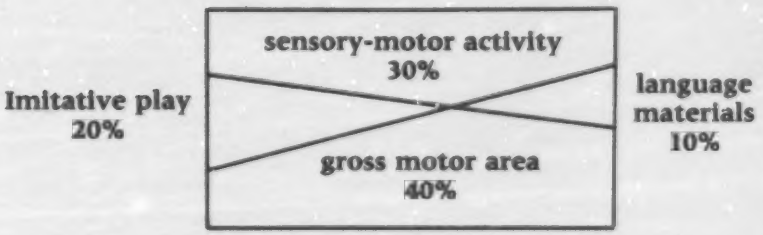
Vary according to age of child

Certain activity areas are considered basic to day care playroom curriculum because they provide essential developmental experiences for the young child. These areas and the amount of space devoted to them vary with the age of the child.

Infant-Toddler Rooms

Four major areas for infant-toddlers

Playrooms for this age group need to contain a simplified organization of space. There should be roughly four major areas. The largest is devoted to gross motor activity, with provision for crawling, climbing, riding and running. Another large area is defined for sensory-motor, and constructive play experiences including block play, water and sand play painting, pets and materials for touching, tasting, and exploring. The third area for imitative play includes materials for dressing up and playing house. The language/concept area contains puzzles, drawing materials, simple manipulative activities, attribute and discrimination materials, picture books, a record player and an adult-sized rocker for sitting on a lap and being read to. Remember, the diagram relates to space distribution and does not indicate the percentage of time or frequency of occurrence of any activity.



Preschool Playroom

Greater complexity for preschoolers

A greater complexity of organization and content of equipment and materials exists in the playroom for three to five-year-olds. Activity areas or centres fall into two general classifications, core and optional. The former are considered essential in every program room. The chart following lists the centres and indicates the most frequent size of group to be accommodated; the most common type of action, and significant or desirable spatial characteristics.

Core Areas

Activity Area/Centre	Usual Number of Children	Common Type of Action	Desirable Spatial Characteristics
Sand Play Area	Pair 3 – 4	Manipulative stand or kneel limited locomotion moderate noise	Room to move, washable, durable, easily swept flooring
Water Play Area	Pair 3 – 4	Manipulative stand, limited locomotion, moderate moderate noise	Room to move, washable, non-slip flooring, close to sink
Art Area Art materials	1 – 4	Stationary, stand or sit, manipulative, moderate noise	Larger area, wettable, wipable flooring, close to sink, display area
Block Area Blocks, construction materials	2 – 6	Highly active, extensive locomotion, noisy	Spacious area, carpeted, firm, level floor
House/Dramatic Play Area	2 – 6	Highly active, extensive locomotion, noisy	Spacious area, different levels, expandability, washable floor
Langua[illegible] Area	1 – 2	Stationary, sit or lie, manipulative, quiet	Small area, intimate, softness, carpeted
Manipulative/Quiet Play Area	1 – 6	Stationary, sit, quiet	Limited area, level, carpeted

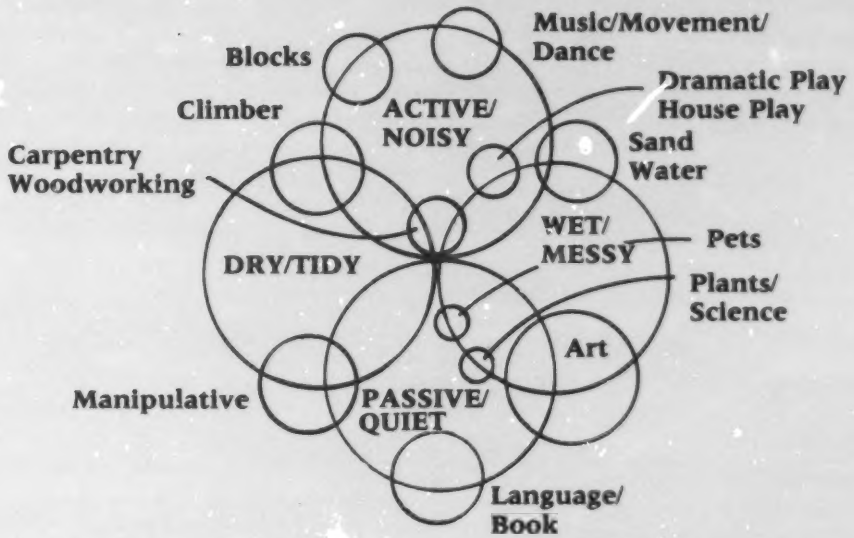
Optional Areas

Activity Area/Centre	Usual Number of Children	Common Type of Action	Desirable Spatial Characteristics
Climber/Gross Motor Area	1 – 6	Extremely vigorous, whole body, noisy	Spacious, resilient landing mats
Music/Movement/ Dance Area	2 – 6	Highly active, whole body, noisy OR Stationary, sit, listen, intermediate noise	Spacious, expandable, carpeted
Carpentry/Wood-working Area	1 – 2	Limited locomotion, stand, manipulative, noisy	Room to move around, durable surfaces, sound absorbing materials
Pets Area	1 – 2	Stationary, stand or kneel, hold, quiet	Limited space, ventilated, draft free, warm, washable
Plant/Science Area	1 – 2	Stationary, stand, manipulative, quiet	Limited space, draft free, washable, water source, well-lighted, high humidity

Highly Desirable Characteristics

Vary according to several factors

As can be seen from the chart, the activity centres vary according to the size of group commonly found there, the amount of action necessary, and other factors including type of flooring and location in respect to room features such as the sink. When planning the room design, it is necessary to first consider general play zones and which activity centre would fit there as in the following diagram.



Centres with similar characteristics zoned together

The placement of the centres in the room is based on the principle of placing active, noisier types of play in one zone, and more passive, quieter types in another. This practice facilitates concentration and involvement in the quieter types of activities. Similarly wet, messy types of activity are located in areas with suitable floor covering and generally near the water source, a sink, or the door if there is no sink in the room. Generally, all other types of activity are best located on carpeted areas for warmth, softness and sound-proofing.

Variation in size

Activity centres also vary in size to encourage a range of experiences in informal, spontaneous play groupings from two to six children. There should always be at least one "hideaway" to give a child a respite from the group when necessary.

Framed by the furnishings

The space assigned to the activity centre is defined and framed by the furnishings. Strategic placement of shelving, screens, tables and other equipment acts to direct the child-player to carry out the activity in the intended area. Placement of chairs on the activity centre side of the table rather than the pathway side keeps play and materials in the area and avoids interruption of activity by passersby.

Potential for expansion of centre space

For centres such as dramatic/house play and block play it is important to provide the opportunity to expand the area when play needs dictate. Such expansion is facilitated by the use of screens and the availability of overlapping areas or transition space. The opportunity to expand and even merge centres generally results from or leads to elaboration of play themes or constructions, a highly desirable development.

A sample room design

The diagram on page 32 shows a day care playroom displaying the recommended characteristics: clearly defined activity centres, clear pathways to the exits, a variety of centre sizes and shapes, noisier and quieter zones. This room has the potential for quick reorganization of the tables for noontime meal service. It can also be easily reorganized with a different arrangement of centres because nearly all the furnishings are movable. The broad expanses of display space add to the opportunity for reorganization.

Planning Techniques

The steps to follow as you set about designing and then reorganizing your playroom are described in the following outline. They have been followed successfully by many participants in workshops and in-service sessions. Working through the steps will take some time but you will find the results worthwhile.

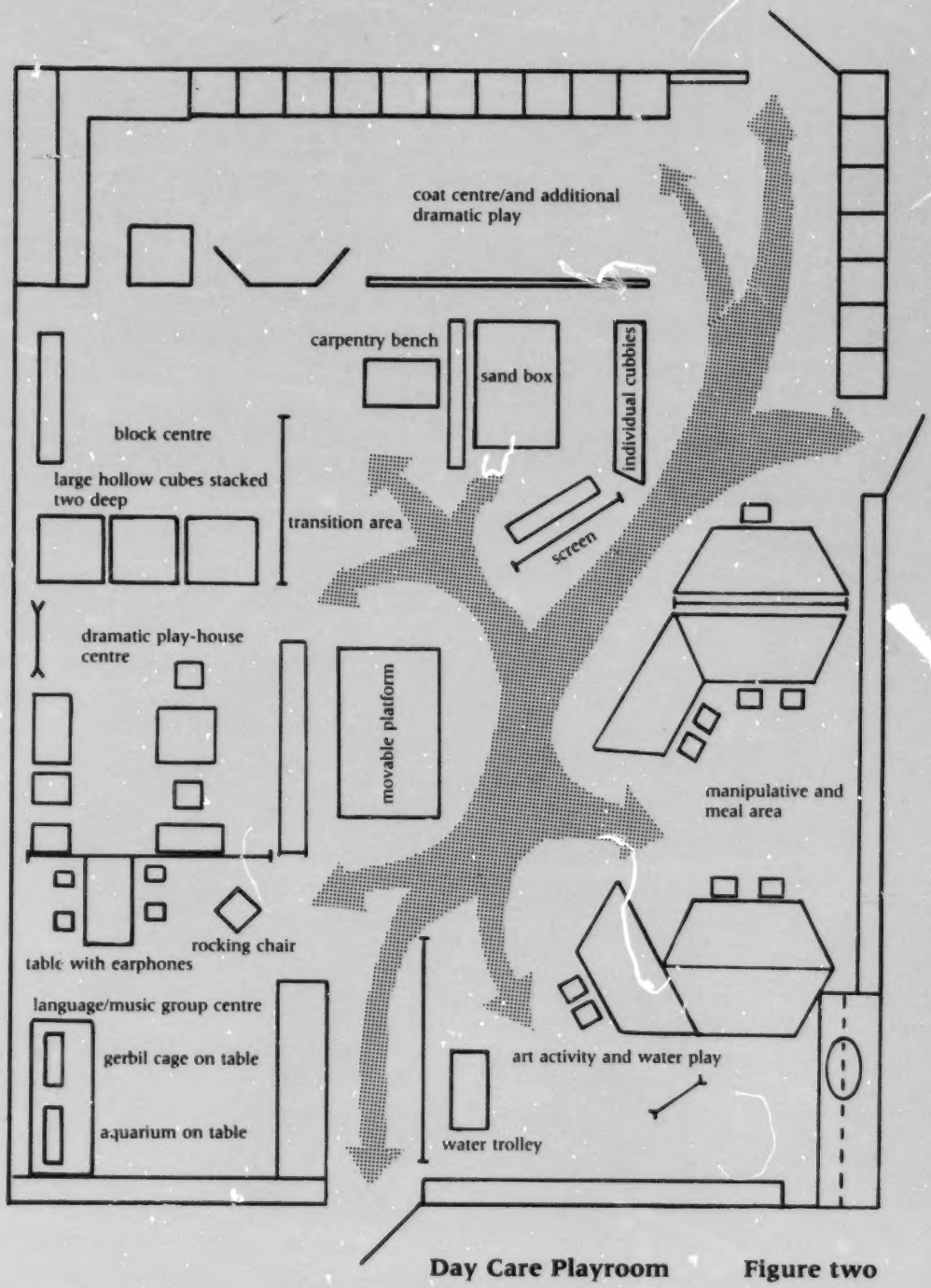
1. Find out what you have available already. Inventory your space, equipment and materials. Obtain the measurements of the room and the major pieces of equipment. Measure for the location of major features in the room: sinks, doors, windows, electric outlets, built-in storage and display, pillars, radiators and lights.

2. Determine the number of centres you want to have on the basis of the age and needs of the children, the number of square metres available, the equipment and materials you now own or plan to purchase. You need to plan enough centres to provide plenty of play opportunities in the room.

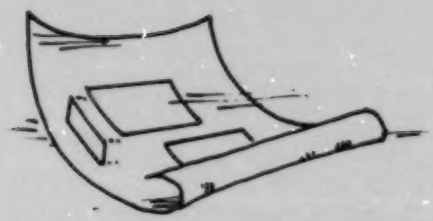
3. Try some quick sketches of the room until you arrive at a possible arrangement. Remember the zones.

4. Make a trial plan of the room. Use graph paper and develop a scale such as one square to 10 centimetres. Draw the outline of the room and mark in the exact location of all room features. Using graph paper, draw to scale and cut out pieces the shape and size of major pieces of equipment such as shelves, sand tables, housekeeping equipment, tables, etc. Arrange these on the room outline according to your sketch. Evaluate your arrangement for definition of centres to keep play in and travel out, clear pathways from each centre to the exits, at least 1/3 space uncovered and at least 1/2 the space covered and no empty space.

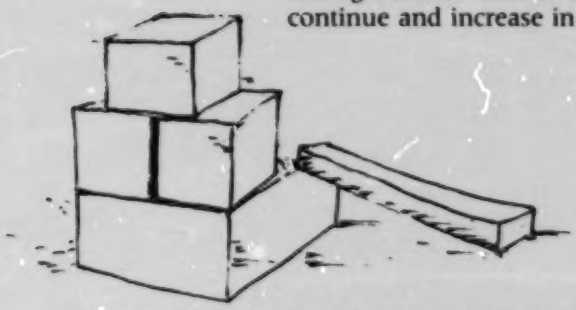
5. Purchase or make necessary equipment and materials to carry out your plan. The references listed have many designs for various items such as screens, shelving, and sand tables. Commercial catalogues are useful resources for ideas and sources of equipment.



Day Care Playroom **Figure two**



6. Rearrange your space. Experienced staff do this late Friday so the change occurs over a weekend.
7. Establish and consistently reinforce the limits for using the space. Generally, though not always, materials should be used in the area in which they are stored. Materials and equipment should be returned to their original location before leaving the area to play elsewhere. Obviously some flexibility is essential to permit innovative uses of materials between areas and to permit elaborate block constructions to remain during outdoor time or even overnight so play can continue and increase in complexity.



8. Carry out some systematic observation to see which areas are being used by which children. Reorganize as necessary to overcome problems which appear and to create novelty and heighten interest.

The time and effort expended to plan and arrange a playroom in activity centres is well worthwhile. This type of space organization is especially suited to the needs of young children who function best in small groupings divided by physical and visual barriers, who need play for the majority of daily activity, whose mode of learning is by exploring and acting on the physical world or interacting spontaneously with peers and adults. The result will be more independent, more involved and happier children which will free staff for greater discretionary use of time to interact individually with children and to facilitate learning through play.

More extensive discussion of the principles and procedures discussed in this brochure are available in the references listed at the end.

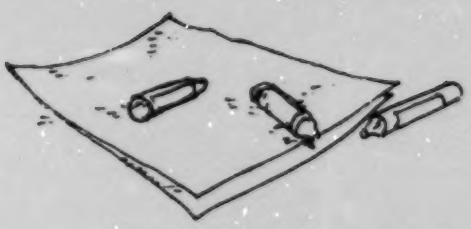
Equipment and Materials for the Playroom

Key factor

Apart from trained staff, sufficient, well-made, well-chosen equipment is the key factor to an adequate program for young children. Selecting, purchasing, and maintaining the inventory records for equipment are time-consuming, tedious tasks, but they must be systematically and carefully done.

Equipment — larger items

The term equipment is used here to refer to furniture and larger, durable play materials. Generally these items are carried in the accounting system as capital costs. The investment in equipment is one of the important start-up costs of a day care program. Equipment prices obtained from suppliers' catalogues and price lists should be used to carefully calculate total costs. At prices current when this brochure was prepared, adequately equipping a classroom for 15 to 20 children using commercial equipment would cost from $7,000 to $10,000.



Materials — expendable items

Materials refer to the expendable, usually smaller items which are used up or quickly worn out, for example poster paint, crayons or table games. A start-up supply of these materials must be purchased and then replenished on a regular basis. These items are generally accounted for as part of the operating expenditures. These materials are generally best purchased and stored on a centre-wide basis.

Maintenance and storage

To provide adequately for the care, storage and purchase of equipment or materials, it is best to designate this responsibility to one staff person. Most equipment and materials are stored in the activity centre where they are used. Here they should be on labelled shelving so they can be consistently replaced.

Each type of material should have its own labelled container, coded for type of material or activity centre and age or skill level. Containers may be plastic bins in fitted shelf units, plastic dishpans, or teacher-made containers such as large overshoe boxes [illegible] cartons, or ice cream containers glamorized with [illegible]-adhesive wipable covering.

Unused and surplus materials should be stored on labelled shelves in a storage area. Almost all materials should be rotated in use to create novelty and interest.

In order to have an accurate record of equipment and materials at the centre, an up-to-date inventory list should be maintained. This list can double as a purchase list for expendable materials or replacement items.

A systematic cleaning schedule should be in place so that each item receives regular cleaning and inspection for damages. All damaged items should be removed from use immediately. The staff person in charge of equipment should maintain a file of resources for equipment purchase and repair.

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Check suppliers

Names and addresses of reliable suppliers should be obtained from other day care centres in your locality. A phone call or letter to a supplier will bring a catalogue and price list for any bona fide customer. Be sure to check with other centres before using a supplier because performance varies widely on delivery times, pricing, back ordering, quality and accepting returns. There are now some very good Canadian suppliers located across the country and orders from them avoid high costs for duties and exchange rates. Visits to other day care centres and conference displays are the best means of actually viewing furnishings and equipment before purchase, an important step because of the poor quality of some commercial items.

Commercial, teacher-made and salvage materials

Commercial suppliers are the most extensive source of equipment and supplies for programs, but equally important sources are teacher-made, specially built, and salvage materials. Careful decisions must be made to avoid false economies in utilizing these three sources. Teacher-made and specially designed materials are valuable where commercial materials are too poorly made, inappropriately scaled for young children, too expensive or simply unavailable. Teachers who want to provide continuous challenge and individualization in programs inevitably find they must create materials related to particular needs or interests of children. Salvage materials from the household, retailers and the junkyard are used in most programs, but they need to be sorted, labelled and stored separately to optimize their value.

Criteria for Choosing Play Equipment and Materials

Stimulus value, appeal or essential function

Before purchasing any item or deciding to make it or have it specially made, consider your decision according to the following list of criteria.

1. The item of equipment or material should be able to attract and retain the interest of children in the age range for which it is intended. Inexpensive, uncomplicated materials such as sand, water and blocks have been found traditionally to be very appealing to children who will often play with these materials for long periods of time. Many slick and expensive commercial materials are designed to appeal to potential adult purchasers and either have little attraction for children or fail to hold their interest.

Alternatively, some items have little intrinsic appeal for children but are essential to the program operation. Such items include shelving, cots and tables.

Potential for a range of uses

2. Materials and equipment which possess the potential for extendability are a better value. These items may provide a range of possibilities from

exploratory to constructive activities, from individual to social cooperative activities, from brief use to lengthy use, from use by younger children to use by older children, for use both indoors and outdoors. Sand and unit blocks are materials which satisfy all these criteria.

Quality

3. Inspect the equipment and materials for quality factors of balance, sturdiness, smoothness of finish, washability and ease of cleaning. Equipment should be joined with screws, not just nailed or glued. Corners should be mitred and fitted for strength. Large equipment should be bolted and braced with no sway or looseness. Solid wood or plywood provides for better wearing qualities than hardboard or chipboard, and hardwood is more durable and less susceptible to splintering than soft wood. Quality materials also possess good design features of line, colour and proportions giving a generally pleasing appearance.

Safety and sanitation

4. All items should be designed to protect the child's safety and health. Large equipment should be scaled to the child's size so there are no long falls. Higher platforms should have railings. Taller, heavier equipment such as climbers, book shelves and play dish cupboards should be stable and non-tippy. Items should be made of non-breakable, non-brittle, non-splintery, non-toxic materials. All items should have washable finishes or be easily laundered.

Cost effectiveness

5. Consider the cost effectiveness of your intended purchases. Equipment and materials should represent an appropriate balance between stimulus value and potential range of use, quality and safety features, and price. You should purchase or make items only if they represent a good return for the money and time involved. Be sure to compare quality as well as prices among suppliers and don't overlook department stores and second hand stores for useful items at lower prices.

Overall acquisition plan

6. All purchases should fit into an overall plan for acquisition of necessary items. The overall plan is based on the need to first provide basic centres with the corresponding basic equipment and materials, gradually adding other materials and centres as finances and time permit. The equipment list following shows the basic and optional items listed separately under the activity areas where they would be located in the playroom.

Playroom Equipment List

Basic Furnishings

1. Tables and chairs for mealtimes. These are used in activity areas between meals.

   - 1 trapezoidal table for each four children, 46 cm high for 3-year-olds, 51 cm – 56 cm for 4 & 5-year-olds.
   - 1 chair for each child, 25 cm seat for 3-year-olds, 30 – 36 cm chair for 4 & 5-year-olds.
   - 1 chair for each required staff.

2. Cots and blankets and pillows for sleeping.

   - 1 stacking cot for each child, equipped with sheet and light washable blanket.
   - For pillows ask each parent to provide a child's t-shirt and sew up the sleeves, neck and waist to cover a piece of foam. Every child will recognize his or her pillow.

3. Waste containers.

4. Screens for defining boundaries/centres, one 0.61 m high screen, one 1.21 m high screen.

Art Centre

Basic	Optional
Furniture	
Easel — double-sided with trough to hold paints.	Drying rack
Storage shelf	Plastic bins in rack (for supplies)
	Paper storage rack
	Paper cutter
	Holder for paper rolls
Painting Supplies	
Brushes with 30 cm handles — soft & stiff bristles 1.27 cm to 2.5 cm	Additional tempera colours
Sheets of heavy gauge plastic to protect table or floor.	Tempera blocks
Powdered tempera: red, yellow, blue, green, orange, purple, black, white, brown.	Water colours
	Brayers
	Prepared fingerpaint
	Shaving cream

Paint shirts
Wallpaper paste
Containers for paint
Fingerpaint materials — soap flakes, cornstarch, liquid soap.

Modelling Supplies

Tightly covered container for moist clay (crock or plastic)
Clay flour
Playdough ingredients — flour, salt, sawdust
Pipe cleaners
Plasticene
Rolling pins
Cookie cutters

Drawing Materials

Large diameter crayons
Chalk pastels — water soluble
Primary pencils
Erasers
Rulers — short, metre stick
Regular crayons
Felt tip markers — medium & jumbo
Low section of chalkboard
Coloured chalk
Chalkboard brushes
Oil pastels
Pencil crayons
Yellow HB pencils
Fabric crayons

Cutting & Gluing Materials

Blunt scissors — right-handed and left-handed
Adult scissors
Wallpaper paste
White bondfast
Paste spreaders
Paste & glue spreaders
Paper punch
Library paste
Rubber cement
Paste brushes

Paper

Newsprint — assorted sizes and roll ends.
Construction paper — assorted sizes and colours
Poster paper — assorted sizes and colours
Heavy shelf paper — 46 cm wide
White cartridge drawing paper, assorted sizes
Heavy weight kraft paper, 46 cm & 61 cm wide
Gummed paper — 20 × 25 cm, assorted colours.
Manilla tag — assorted sizes
Bristolboard — assorted colours
Finger paint paper — 46 cm × 61 cm
Corrugated rolls, assorted colours
Crepe papers, assorted colours
Cellophane — assorted colours
Tissue paper — assorted colours
Gummed paper squares
Gummed paper circles
Tracing paper
Onionskin

Miscellaneous Art Materials

Aluminum foil
Paper towels
Paper plates
Paper cups
Wooden stirring sticks
Powdered alum
Dettol
Glycerin

Blunt needles
Blank sewing cards
Perforating needles
Wool — assorted colours
Masking tape
Egg carton
Liquid soap
Straight pins
Paper fasteners
Fabric scraps
Cotton batting rolls
String
Rubber bands
Cellulose tape
Stapler and staples
Thumb tacks
Large boxes of "found" materials
Paper clips
Wax paper
Food colouring

Plastic lacing
Twistems
Plastic drinking straws
Paper drinking straws
Tongue depressors
Pipe cleaners
Clothespins
Felt — assorted colours
Clear "mac tac"
Glitter
Burlap
Raffia — assorted sizes
Cotton puffs
Q-tips
Shellac
Sponges
Yarn dispenser

Special Needs Children
Easy-grip scissors

Block Centre

Basic	Optional
Furniture	
Unit block storage shelf	
Hollow block storage shelf	
Rocking boat	
Blocks	
Hollow block set	
Unit block set	
Tinkertoys — large set	
Interlocking plastic block sets large & small	
Accessories	
Wooden train set	Animal sets — farm, zoo, wild
Cars, trucks, airplanes — large & small wooden or metal	Family miniatures
	Transportation signs
	Toy village, toy farm, toy airport, toy castle, toy garage
	Pictures of buildings
Special Needs Accessories	
Roads with built-up sides	

Dramatic Play/House Centre

Basic	Optional
Furniture	
Kitchen set: stove, sink, small square table with chairs	Refrigerator, dish cupboard
Cradle	Bed — child-sized
Storage shelves for equipment	Rocking chair
Rack for dress-up clothing	Dresser
House Play	
Housekeeping: baking utensil set, dishes set, pots & pans set, cleaning equipment, ironing equipment — board, wooden iron.	Dish rack
Dress-up Play	
Articles of adult clothing	Wigs
Mirror	Makeup
Occupational clothing — helmets, hats, shoes, lunch bucket, briefcase, masks.	Prop kits: large boxes containing an assortment of prop materials: postal, store, hospital, restaurant, beauty salon, barber shop, office, mechanic, farmer, specific cultural, historical and mythical themes.
Doll Play	
Assorted dolls — male, female, ethnic	Doll stroller — child-sized
Doll accessories — bedding, bottles, clothes	Doll bathtub
	Dollhouse high chair
	Dollhouse
	Dollhouse furniture
Miscellaneous	
Telephone	
Cuddly stuffed toys	
Puppet	
Hand puppets	Puppet theatre
People puppets	Body puppets
	Finger puppets
Special Needs Accessories	
Dress-up clothing with large buttons, zippers, snaps.	
Child-size clothing	
Pictures: household items, emotions, feelings	

Gross Motor Area

Basic	Optional
Climbing Equipment	
Trestles — 1 m	Gangplank
Ladder	Teeter board
Slide	Extensions for trestles
Balance beam	Rings
	Climbing rope
	Trapeze
Games Equipment	
Balls, assorted — rubber, soccer, large, medium	Bats — large, light
	Punching bag
Bean bags	Large ropes
Skipping ropes	Hoops
	Bowling set
Gymnastics Equipment	
Rocking boat	Trampoline
Tumbling mats	Rocking horse
	Springboard
	Box horse
	Large inflated mattress
Wheeled Equipment	
Tricycles	"Big wheels" riding toys
Kiddy cars	Tractors
Wagons	Wheelbarrow — child-sized

Library/Language/Book Centre

Basic	Optional
Furniture	
Book shelf (display rack type)	Adult rocking chair or armchair
Carpet	Foam chips chair
Large cushions	Child-sized sofa, armchair, rocker
Looking Materials	
Picture books: variety for different ages	Photo album
Children-made booklets	Slide projector
Pictures	Slide sets
	Viewers
	Movie projector
	Filmstrip projector
Listening Materials	
Record player	Listening centre with headphone sets
Records — assorted, song, story, classical	

Tape Recorder	
Tapes	Tapes or records to accompany picture books, slide sets or filmstrips.
Talking Materials	
Study prints/posters: emotions, feelings, self, family, community.	Additional poster sets: colours, shapes, occupations, words, numbers, letters. Chart stand Chart stand sheets
Concept Materials	
Flannelboard Flannelboard accessory sets, assorted: people, clothing, animals, farm, zoo, holidays.	Easel for flannelboard Additional sets: numbers, letters, fruits, body parts. Records & booklets for flannelgraph Readiness sets for flannelgraph Magnetic board Magnetic board sets
Special Needs Accessories	
Books: simple stories, repetition, pictures only Records/Tapes: following directions, familiar sounds.	

Manipulative/Constructive/ Quiet Play Area

Basic	Optional
Furniture	
Storage shelf Table Chairs Carpet area for floor play	Puzzle rack Shelf with racks for bins
Puzzles	
Wooden form boards of 5 – 20 pieces Wooden inlay puzzles of 5 – 30 pieces Cardboard puzzles of 5 – 100 pieces	Additional form boards Floor puzzles of 15 – 50 pieces Multi-texture puzzles Foam rubber puzzles Plastic puzzles Sequence puzzles
Pegboards	
Wooden pegboards: large with large holes, large with small holes, small with small holes Straight pegs — small & large Round-headed pegs	Giant pegboards Crepe foam pegboard Small pegboard — large holes Electrically-lighted pegboard with coloured translucent pegs

Manipulative

- Large wooden beads with large holes
- Laces
- Pounding boards with mallets
- Nesting beakers & cups
- Stacking pole with cylinders
- Parquetry blocks, large & small
- Assorted shape toys: posting, boxes, etc.
- Large wooden beads with small holes
- Small beads
- Bead patterns
- Apparatus with bolts, screws & tools
- Clothing set — snapping, buttoning, zippering, lacing
- Nesting boxes, baskets, barrels and cubes
- Form box
- Elastic board
- Parquetry patterns
- Lock & key board
- Abacus

Games

- Picture lotto
- Number lotto
- Card games
- Board games
- Dominoes
- Letter lotto
- Concept lotto — assorted

Constructive

- Small square wooden cubes
- Small scale unit block set
- Regular lego
- Tinkertoy — large & small
- Cube patterns
- Giant lego
- Briomec
- Assorted interlocking plastic and wooden apparatus

Sewing

- Blunt needles
- Sharp scissors
- Blank sewing cards
- Rug-backing
- Assorted wool
- Embroidery hoop
- Burlap
- Sharp large needles with large eyes
- Embroidery cotton

Special Needs Materials

- Boxes with removable lids — assorted sizes
- Jars with removable lids — assorted sizes
- Tongs
- Tweezers
- Clothespins
- Threading Blocks

Music/Movement/Centre

Basic	Optional
Furniture	
Record player	Tape recorder
Records: folksongs, children's songs, singing games, classical and pop, rhythm & movement	Tapes: same as records, blank
	Piano
	Chime bars
Song books	Extra rhythm instruments
Rhythm instruments — assorted	Bongo drums
Hand drum	Listening centre with headphones
Xylophone	Autoharp
Special Needs Accessories	
Instruments with large knobs	

Sand Centre

Basic	Optional
Furniture	
Sand table — large	
Shelf for equipment	
Accessories for Play	
Plastic beakers or measuring cups, assorted sizes	Miniature people
	Animal sets
Pails	Rakes & hoes
Shovels & Scoops	Molds & cookie cutters
Sifters	Muffin tins
Funnels	Sprinkler can
Small vehicles	Small boards
	Screen

Science/Pet Centre

Basic	Optional
Furniture	
Tables	Aquarium
Shelving for materials	Hot plate
Pet cages	Convection oven
Light source for plants	

Concept Materials	
Magnets — assorted sizes & shapes	Iron fillings
Items made of iron	Metric scale
Balance scales	Microscope
Items for weighing	Flashlight
Magnifying glass	Prism
Items to view	Globe
Thermometer	Stethescope
	Skeleton
	Hand mirror
	Ant farm
Nature Materials	
Plants	Terrarium
Watering can	Potting materials
Pets — guinea pigs	Gerbils, hamsters, rabbits, snakes
Pet food	Fish & fish food
Cooking	
Cooking utensils	
Ingredients	
Recipe charts	
Aprons	
Oven mitts	

Water Play Centre

Basic	**Optional**
Furniture	
Water table — large	
Shelving for storage of accessories	
Accessories	
Aprons	Siphon
Containers	Plastic tubing
Funnels	Food colouring
Beakers & measuring cups — assorted sizes	Liquid soap
	Floating toys
Egg beater	Bubble pipes
Sieve	Straws for blowing bubbles
Sponges & mop	Water pump
Bowls — assorted sizes	Water wheel
	Squirt bottles
Special Needs Accessories	
Transparent containers with levels marked	

Woodworking/Carpentry Centre

Basic	Optional
Furniture	
Woodworking bench — 122 cm square, 51 cm – 56 cm high. (Be sure it is sturdy, low and has a large top. The child needs to be able to get a knee up on it. You will probably need to have it specially made. I have yet to find an acceptable commercial one.)	
Tool rack (A wooden board with hooks or nails to hold specific tools. Trace the shape of the tool on the board where the tool hangs.)	
Box or rack for wooden scraps.	
Tools (Go to the hardware store and buy good, real tools)	
Hammer	Screwdriver
Saws	Screws
Vise	Brace and bit
Clamps	Pliers
Assorted soft wood scraps	Sandpaper
Nails with large heads	Spools
Assorted other nails	Shellac
	Styrofoam
	Paint

Reference List

C

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General References on Space, Equipment & Materials

Campbell, Sheila D., & Dill, Nancy. *Glengarry Research Project Report: The Effects of a Change in Spatial Density on Children's Behavior in a Day Care Setting.* Dept. of Elementary Education, University of Alberta, Edmonton, Alberta, 1980. (ERIC Information Retrieval No. PS 012 265).

Crandell, J.M. *Early to Learn.* Dodd, Mead & Co., N.Y., 1974.

Dean, Joan. *Room to Learn.* Evans Brothers Ltd., London, 1973.

Educational Facilities Laboratories, Madison Ave., New York, N.Y., 10022. Reports: Abramson, Paul. *Schools for Early Childhood,* 1970. *The Early Learning Centre,* 1970. *Found Spaces and Equipment for Children's Centres,* 1972. Osmon, F.L. *Patterns for Designing Children's Centers,* 1971.

Evans, E.B., Shub, B., & Weinstein, M. *Day Care: How to Plan, Develop and Operate a Day Care Center.* Beacon Press, Boston, 1971.

Evans, E.B., Saia, G., & Evans, E.A. *Designing a Day Care Center: How to Select, Design and Develop a Day Care Environment.* Beacon Press, Boston, 1974.

Evans, E.B., & Saia, G.E. *Day Care for Infants.* Beacon Press, Boston, 1972. Chapter 9, "Developing the Classrooms for Infant-Toddlers and Toddler Two-Year-Olds."

Haase, R.W. *Designing the Child Development Center.* Office of Child Development, U.S. Department of Health, Education and Welfare, Washington, D.C. 20201, 1969.

Harms, T., & Cross, L. *Environmental Provisions in Day Care.* Frank Porter Graham Child Development Center, U. of North Carolina, Chapel Hill, N.C., 1977.

Kritchevsky, S.E., Prescott, E., & Walling, L. *Planning Environments for Young Children: Physical Space.* National Association for the Education of Young Children, Washington, 1969.

List of Resource Materials. Children's Environments Advisory Service, Canada Mortgage and Housing Corporation, Ottawa, Ont. K1A 0P7.

Mattick, I., & Perkins, F.J. *Guidelines for Observation and Assessment: An Approach to Evaluating the Learning Environment of a Day Care Center,* 3rd Ed. The Day Care and Child Development Council of America, Washington, D.C., 1974. Read pp. 2-9 "Space and Materials." Will help you assess the quality of your present space.

Play Pages 1 – 10. Canada Council on Children and Youth, 323 Chapel Street, Ottawa, Ont. K1N 7Z2, 1976. (A series of bibliographies on ten different areas of children's play. Charge for postage only.)

Play Space Guidelines. Canadian Council on Children and Youth, Ottawa, Ont., 1980.

Play Spaces for Preschoolers, Canada Mortgage and Housing Corporation, Ottawa, Ont., 1978.

Phyfe-Perkins, E. Children's Behavior in Preschool Settings — A Review of Research Concerning the Influence of the Physical Environment. In Katz, L.G. *Current Topics in Early Childhood Education,* Vol. III. Ablex Pub., Norwood, N.J., 1980.

Sunderlin, Sylvia & Gray, Nan (eds). *Housing for Early Childhood Education.* Association for Childhood Education International, Washington, D.C., 1968.

Taylor, A.P. & Vlastos, G. *School Zone: Learning Environments for Children,* Van Nostrand Reinhold, N.Y., 1975.

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Outdoor Play Space/The Playyard

A Playground for all Children.
Book 1. *User Groups and Site Selection.*
2. *Design Competition Program.*
3. *Resource Book.*
Office of Policy Development and Research, U.S. Department of Housing and Urban Development, Washington, D.C., 1978.

Bengtsson, Arvid. *Adventure Playgrounds.* General Publishing Ltd., Don Mills, Ont., 1972.

Bengtsson, Arvid. *Environmental Planning for Children's Play.* Burns and MacEachern, Don Mills, Ont., 1970.

Children's Rooms & Play Yards. A Sunset Book, Lane Brothers, Menlo Park, Calif., 1974.

Creative Playground Equipment — A Guide. Ontario Ministry of Culture and Recreation. Toronto, Ont., 1979.

Creative Playground Information Kit I and *Adventure Playground Information Kit II* available from Children's Environments Advisory Service, Canada Mortgage and Housing Corporation, Ottawa, Ont., K1A 0P7.

Dattner, Richard. *Design for Play.* M.I.T. Press, Cambridge, Mass., 1974.

Ellison, Gail. *Play Structures.* Pacific Oaks College and Children's School, 714 West California Boulevard, Pasadena, Calif., 91105.

Friedberg, M. Paul. *Do-It-Yourself Playgrounds.* Architectural Press, Great Britain, 1976.

Friedberg, M.P. *Handcrafted Playgrounds: Designs You Can Build Yourself.* Mississauga, Ont.: Random House, 1975.

Frost, J.L., & Klein, B.L. *Children's Play and Playgrounds.* Allyn and Bacon, Toronto, 1979.

Gordon, Ronnie. *The Design of a Preschool Therapeutic Playground: An Outdoor "Learning Laboratory."* New York Medical Center, 401 East 34th Ave., New York, N.Y., 1972.

Hewes, Jeremy H. *Build Your Own Playground.* Houghton Mifflin, Boston, 1975.

Hogan, Paul. *Playgrounds for Free: The Utilization of Used and Surplus Materials in Playground Construction.* The M.I.T. Press, Cambridge, Mass., 1974.

Playground Development Guide. Alberta Dept. of Recreation and Parks, Edmonton, Alberta, 1978.

Rouard, M., & Simon, J. *Children's Play Spaces: From Sandbox to Adventure Playground.* (Trans. L. Geuser) The Overlook Press, Woodstock, N.Y., 1977.

Rudolph, Nancy. *Workyards.* Teachers College Press, New York, 1974.

Stone, J.G., & Rudolph, N. *Play and Playgrounds.* National Association for the Education of Young Children, Washington, D.C., 1970.

Vance, Bill. *Adventure Playground: How-to-Manual.* Huntington Beach Recreation and Parks Department, P.O. Box 190, Huntington Beach, Calif., 1974.

Wilkinson, P.F. (Ed.). *Innovation in Play Environments.* New York: St. Martin's Press, 1980.

Zuk, W.M. *Early Childhood Development: An Orientation to the Planning of Outdoor Play Environments.* Planning and Research Division, Department of Education, Winnipeg, Man., 1974.

Equipment and Materials for Play

Creating With Materials for Work and Play. Association for Childhood Education International, 3615 Wisconsin Ave., N.W., Washington, D.C. 20016, 1969.

Danger on the Playground. Fair Play for Children, 248 Kentish Town Road, Nottingham, London, NWS, England, 1978.

Good Toys Tested and Recommended. The Canadian Toy Testing Council, P.O. Box 6014, Station J., Ottawa, Ont., K2A 1T1.

Kaplan. Kaplan, et. al. *A Young Child Experiences*. Goodyear Publishing Co., Pacific Palisades, Calif., 1975.

Norris, Jill. *Choosing Toys and Activities for Handicapped Children*. Toy Libraries Association, Seabrook House, Darkes Lane, Potters Bar, Herts, England. EN6 2HL

Physical Resources Guide. Early Childhood Services Branch, Alberta Department of Education, Edmonton, Alberta.

Play: Children's Business with a Guide to Play Materials. (by Patricia Markun) Association for Childhood Education International, 3614 Wisconsin Ave., N.W., Washington, D.C. 20016, 1974. (Booklet)

Audio-Visual Materials

Films & Filmstrips

Association Films, Inc., 600 Madison Ave., New York, N.Y. 10022. (1969). *Room to Learn*. 22 min., 16 mm., sound, color. Presents Early Learning Center in Stamford, Conn., an open-plan early childhood school with modern facilities and program.

Campus Film Distributors Corp., 2 Overhill Rd., Scarsdale, N.Y. 10583. *"Special Children Special Needs"* 16mm., sound, color, 22 min. Presents a sensitive and comprehensive developmental approach to educating young multi-handicapped children. The film documents three adapted learning environments; an infant school, a preschool learning laboratory, and an outdoor therapeutic playground. The educational orientation of the program is developmentalinteraction, in that each child's therapeutic program is based on his specific abilities and disabilities in order to provide the child a maximum opportunity to be effective and more competent in his experiences with people and objects.

Campus Film Distributors Corp., 2 Overhill Rd., Scarsdale, N.Y. 10583. *"Concept Development in Outdoor Play"*. 18 minutes. Rental Fee: $20.00, Purchase Price: $215.00, 1974. This film is the fifth film in a teacher training series and presents the unique advantages the outdoors provides when painting, sand play, water play, woodworking, music, water painting, and science and dramatic play activities are taken outdoors. The effects of greater space, environment, trees, sun, wind and the boundless quality of sound are shown in relation to the activities mentioned above. The development of concepts relating to reading, mathematics, science, social studies and asthetics are presented. The film complements the concepts presented in the film, "Outdoor Play A Motivating Force For Learning."

Campus Film Distributors Corp., 2 Overhill Rd., Scarsdale, N.Y. *"Outdoor Play...A Motivating Force For Learning."* 17 minutes, Rental Fee: $20.00, Purchase Price: $200.00, 1973. Fourth in a series of teacher training films for early childhood education. It presents the unique physical and intellectual development provided by outdoor play activities and shows the extensive use of improvised materials. The film highlights the children's exploration of space, experimentation with balance, development of muscular coordination and body awareness. Also illustrated are developmental differences, self-determined activities and goals, and the role of the teacher.

Campus Film Distributors Corp., 2 Overhill Rd., Scarsdale, N.Y. *"Setting Up A Room... Creating An Environment For Learning"* 27 minutes, Rental Fee $20.00, Purchase Price: $185.00. The first in a series of films for teachers of early childhood education. It shows a teacher and assistant at the beginning of a school year, as they plan to set up their early childhood classroom. Through live dialogue and narration, the film conveys the process of planning the room, establishing the basic work and play areas and arranging supplementary materials in order to create a functional, flexible room environment for children.

Campus Film Productions, Inc., 20 East 46 St., New York, N.Y. 10017. (1961). *Blocks: A Material for Creative Play.* 16 minutes, 16mm., sound, color, b & w.

Blocks: A Medium for Perceptual Learning. 17 minutes, 16mm., sound, color. (1969).

Canada Mortgage and Housing Corporation, National Office, Montreal Rd., Ottawa, Ontario, K1A 0P7. Available on loan. *Where Do Creative Children Play?* (English/French), 16mm., color, 5 min.

Churchill Films, 662 N. Robertson Blvd., Los Angeles, Calif. 90069. (1966). *Setting the Stage for Learning.* 22 min., 16mm., sound, b & w. Contrasts activities of children playing in sandbox without tools or toys with situations in which teachers' ingenuity enlarges children's learning experiences.

High/Scope Educational Research Foundation, 600 N. River St., Ypsilanti, Michigan, 48197, U.S. Film: *Classroom Structure and Equipment,* 16mm., color, 8 minutes. Color filmstrips and cassette tapes: *The Block Area,* 38.7 minutes total.

Modern Talking Pictures Service, Inc., 2323 New Hyde Park Rd., New Hyde Park, Long Island, N.Y. 11040. (1967). *Organizing Free Play.* 22 minutes, 16mm., sound, b & w. Demonstrates what free play is, how to plan for it, and how to arrange space and equipment.

Photography Department, The Ohio State University, Columbus, Ohio. 43210. *School for Fours.* 28 minutes, 16mm., sound, b & w. Presents a learning program including stories, social time, lunch, creative drama, music, and nature study.

Preschool Education Council Project. MacMillan Film Productions Ltd., 1974. *Structuring Play in the Early Years Series: Blocks, Sand, Water.* 16mm., color, 15 – 20 minutes each. Available on loan from Audiovisual Services Branch, Alberta Education, Edwards Bldg., 10105 – 109 St., Edmonton, Alberta.

University of California, Extension Media Center, 2223 Fulton St., Berkeley, Calif. 94720. *Planning Creative Play Equipment for Young Children — Outdoor.* 16 minutes, 16mm., sound, color. Shows variety of play materials and demonstrates how a community provided creative play equipment for its children. Available from National Film Board, Canada. See your local office.

Slide sets

Canada Mortgage and Housing Corporation, National Office, Montreal Rd., Ottawa, Ontario, K1A 0P7. Available on loan with English or French tape cassettes and scripts.
A Creative Playground, What's That? 69 slides
An Adventure Playground, What's That? 78 slides
Planning Play Space for Young Children. 74 slides

Videotapes

Drake Educational Association, 212 Whitchurch Rd., Cardiff, England. CF4 3XF. *Domestic Play* (Housekeeping), *Construction Play, Make/Believe Play, Play with Natural Materials, Play Outdoors.* (Available in North American 525 line standard.)

Useful Organizations and Agencies

Canadian Council on Childer and Youth, 323 Chapel Street, Ottawa, Ont., K1N 7Z2. Useful information on children's play.

Canadian Toy Testing Council, P.O. Box 6014, Station J., Ottawa, Ont. K2A 1T1. Publishes a yearly guide to purchase of toys.

Children's Environments Advisory Service, Canada Mortgage and Housing Corporation, Montreal Rd., Ottawa, Ont. K1A 0P7.

Playground Clearing House, Inc. 26 Buckwalter Rd., Phoenixville, Penn. 19460, U.S.A. Information on latest publications, films, slides, etc.

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